Hazardous Waste Management Commission Report

January through March 2014

Quarterly Report

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

COMMISIONERS

Hazardous Waste Management Commissioners

Deron Sugg, Chair
Charles Adams, Vice Chair
Andrew Bracker
James "Jamie" Frakes
Elizabeth Aull
Michael Foresman

"The goal of the Hazardous Waste Program is to protect human health and the environment from threats posed by hazardous waste."

For more information:

Missouri Department of Natural Resources
Hazardous Waste Program
P.O. Box 176, Jefferson City, MO 65102-0176
www.dnr.mo.gov/env/hwp/index.html
Phone: 573-751-3176
Fax: 573-751-7869

Past issues of the Hazardous Waste Management Commission Report are available online at www.dnr.mo.gov/env/hwp/quarerlyreport.htm.

Missouri Department of Natural Resources
Hazardous Waste Program

Cover Photo: Treatment pump pilot study at Richards-Gebaur Air Force Base.

Letter from the Director

This report to the Hazardous Waste Management Commission covers the time period of January through March 2014. This time of the year marks the first half of the legislative session, which is a time where we begin to see a lot of requests for fiscal notes and other information related to proposed bills. Department and program staff devote a lot of time to these requests, as it is important to ensure that legislators have the best information available to them, in order to make informed decisions on any potential new laws.

While our program staff gear up to work on information requests related to the current legislative session, they are also continuing to work on several issues related to bills that were passed into law in previous years. The program continues to make good progress on meeting the requirements of HB1251 or the "No Stricter Than" legislation enacted during the 2012 legislative session. This quarter finds staff continuing to work on the text of the rules to ensure references are correct and the incorporation of new federal rules is complete. The program also held a Hazardous Waste Forum meeting during this quarter to discuss the proposed rule language and other issues with stakeholders, which resulted in general agreement of those in attendance with the draft documents presented. Subsequently, with the commission's approval of the Finding of Necessity for the "No Stricter Than" rule package at the February 2014 meeting, staff are working on preparing the Regulatory Impact Report (RIR) for this rulemaking package. The RIR is expected to be completed and released for public comment later this summer.

Last year's legislative session also brought new requirements for the department's fact sheets and guidance documents. These requirements were included as one of the provisions in HB650 and HB28. This legislation requires the review of all fact sheets and guidance documents produced by the department for external dissemination, and requires the addition of the appropriate division director's name, the production date of the fact sheet or guidance document and a statement that the fact sheets or guidance documents could not be used for enforcement action unless they were adopted as a rule. The department has a multitude of fact sheets and guidance documents targeted to many types of users, with the program alone having just fewer than 100 requiring this review. These documents were reviewed individually for applicability, and updated as necessary to ensure they were current. The program uses these fact sheets and guidance documents to assist the regulated community and the public in understanding the requirements of our rules and regulations. These "easy to read" reference materials are available on the department's website, providing easy to understand answers to real-life situations that may be faced by the regulated community or the public, helping them to better understand how to comply with Missouri's laws and regulations.

In addition to the efforts related to recently passed laws, staff are ramping up for a new round of pesticide collections for 2014. While this quarter finds us still in the planning stage, the first collection event was set for May 31st, in Perryville. With lessons learned from our initial collection events last year, we anticipate good results from this year's events.

These are some of the many efforts undertaken by the program during this quarter. In addition to these activities, this report will provide an update on the remediation efforts of our different sections, permitting accomplishments, enforcement activities and an update on our tanks program. We hope you enjoy reading about these activities and the program's many accomplishments.

Sincerely,

David J. Lamb

TABLE OF CONTENTS

Table of Contents

Pilot Studies Pave the Way for the Federal Facilities Section

Current Pilot Studies

According to the dictionary a "pilot study" is a small-scale experiment or set of observations undertaken to decide how and whether to launch a full-scale project. This preliminary study is conducted in order to evaluate feasibility, time, cost and adverse events in an attempt to predict an appropriate sample size and improve upon the study design prior to performing a full-blown research project. Pilot study experiments are frequently carried out before large-scale studies, in an attempt to avoid time and money being wasted on projects that may not work due to unforeseen environmental factors. There are numerous sites within the Federal Facilities Section where pilot studies are currently taking place or where they are being considered.

One site currently heading up a pilot study on neutralizing explosives is the Lake City Army Ammunition Plant, in Independence. Lake City is the only government-owned, contractor-operated small arms manufacturer for the Army. The plant is the single largest producer of small arms ammunition for the United States military; producing nearly 1.4 billion rounds of ammunition per year. Because of these activities, chemicals that have explosive characteristics may potentially be in production buildings which are no longer being used. These buildings have also been identified to potentially contain a variety of mixed wastes including asbestos and heavy metals. Missouri asbestos abatement regulations require asbestos to be removed prior to building demolition. However, known explosive material has penetrated the concrete and wooden structures of the abandoned buildings, causing removal of the asbestos prior to abating the other materials to be an extreme risk to construction workers. The U.S. Army Corps of Engineers is managing the laboratory trials of the neutralization pilot study and preliminary results are quite positive. This pilot study, once completed, should be applicable to any abandoned, mixed waste, Army ammunition structures across the United States.

Another site conducting a pilot study is a former grain bin in Montgomery City. From 1949 to 1966, the U.S. Department of Agriculture operated a grain storage facility on property leased from the Montgomery County Fair Society. During this time, commercial grain fumigants containing carbon tetrachloride were commonly used to preserve grain in storage. Because of its harmful effects, carbon tetrachloride is now banned in pesticide use and it is only used in some industrial applications. In 2012, the Department of Agriculture conducted a pilot study using in situ chemical reduction technology for the treatment of carbon tetrachloride contamination found in soils and groundwater at the site. 34 shallow wells and 68 deep wells were installed and injected with a material developed to stimulate reduction of the contamination through physical, chemical and microbiological processes. They have been monitoring the site for a year and will have results out this summer to see if it can be considered a remedy for the site.

One more site with active pilot project is the former Richards-Gebaur Air Force Base, located near Kansas City. The base was deactivated as an active military facility and in 1980, 80 percent of the base was declared surplus property. At the base, low-levels of solvent contamination are still in the groundwater. Currently, the Air Force is conducting the Treatment Sump Pilot Study. This involves excavating soil to bedrock and backfilling with a lactose compound and rock. This will make the area more conducive to solvent breakdown. The expectation is that the contaminated water will pool in the area and treat the contamination when they come in contact with each other. Another ongoing pilot study is bedrock injections, where again a lactose compound is injected into bedrock to help break down the solvent.

The Air Force is also planning another pilot study at the former Richards-Gebaur Air Force Base that will create a trench so the lactose compound will flow into the weathered bedrock, where the solvent contamination is located. As you can see various delivery methods for the lactose compound are being tested to find the most effective way to remediate the site based on contamination location.

Upcoming Pilot Studies on Vapor Intrusion

Staff performing a treatment pump pilot study at Richards-Gebaur Air Force Base

According to the Environmental Protection Agency (EPA) "vapor intrusion" is defined as vapor-phase migration of volatile organic compounds or volatile inorganic compounds into occupied buildings from underlying contaminated groundwater or soil. Until recently, this transport pathway was not routinely considered under the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); or underground storage tank investigations. Therefore, the number of buildings or homes where vapor intrusion has occurred is undefined.

The former Kirksville Air Force Station, located just outside of Kirksville, has a solvent plume that is migrating directly towards a privatly owned residence. The U.S. Army Corps of Engineers has discovered contamination just 50 feet from the house. As vapor intrusion studies and technologies have evolved and the possible risk vapor intrusion can pose to the public the more there is a need for additional investigation. In order the answer that call the Missouri Department of Natural Resources and the U.S. Army Corps of Engineers have decided to conduct a vapor intrusion study in the basement of the residence. The study should begin this fall.

A former dry cleaning facility at Fort Leonard Wood used "perc" or PCE, a common dry cleaning solvent. Reportedly, when spills occurred, workers mopped the PCE down the drain, which led to a losing stream next to the property. The Army has stated that their preference for the future use of the site is for industrial purposes however, they realize the need to prevent future workers from exposure to harmful contaminants. Because of this, the department has stated that the Army must fully investigate this site, including a vapor intrusion investigation. The department expects the investigation to take place in the fall of 2014.

As seen by these examples, pilot studies are being conducted all over the state at both active and incative federal facility sites. Because of the large size of these sites, often covering hundreds of acres, pilot studies are more efficient and save money in the long run. They also provide opportunities to try out new ideas on a small scale. If a pilot study works, it benefits the overall cleanup. If it does not work, it still supplies valuable information. In either case there are many lessons learned and applied to future studies.

Brownfields/Voluntary Cleanup Program Certificates of Completions

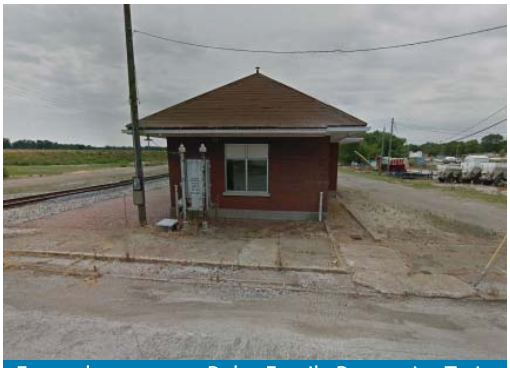
Brownfields are real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Through this program, private parties agree to clean up a contaminated site and are offered some protection from future state and federal enforcement action at the site in the form of a "no further action" letter or "certificate of completion" from the state.

The Brownfields/Voluntary Cleanup Program (BVCP) issued 16 certificates of completion for various sites from January through March 2014. This brings the total number of certificates of completions to 726.

Community Development Block Grant Awarded to the City of Canton

The state of Missouri awarded a Community Development Block Grant of $1,990,000 to the city of Canton to purchase, clear and prepare ten blighted properties for the site of a new grain elevator. The Pulse Family Property Sites were asssessed by the department as part of the Brownfield Assessment Program. As part of the BVCP remediation process, the ten properties were cleared of environmental issues and contamination. This project will have a positive impact on the local agricultural community including local farmers and businesses.

There were numerous stakeholders involved in this process including the Governor's office, the Lewis County Industrial Development Authoritiy (LCIDA), the city of Canton, Ursa Farmer's Cooperative, Missouri Department of Economic Development and the Missouri Department of Natural Resources. The Ursa Farmer's Cooperative (UFC) and the 400 Missouri farm families who belong to the cooperative have invested $6 million to construct a new state of the art grain elevator facility. Missouri farmers provide UFC with 4 million bushels of corn and beans annually. This is an excellent example of community and business working together for the benefit of everyone.



Example property, Pulse Family Properties Train Depot - Canton

Pulse Family Properties Train Depot - Canton

The Train Depot site, 101 Lewis St., Canton, is gravel and grass covered and contains a one-story brick building. It has been used as train depot, office space, bulk oil station, fish market and a salting/pickling manufacturer. Based on a historical review it was found that gasoline and oil tanks were in use on the southern end of the property from approximately 1917 to 1940.

Site investigations indicated suspect lead-based paint (LBP) and asbestos-containing materials (ACM) may have been present. Soil samples indicated petroleum hydrocarbons and lead were detected; however, the concentrations did not exceed the Missouri Risk-Based Corrective Action (MRBCA) residential risk based target levels (RBTLs). Groundwater samples indicated concentrations of petroleum hydrocarbons were detected; however the concentrations did not exceed the MRBCA residential RBTLs. The department determined that the site is safe for its intended use.

Pulse Family Properties Steel Frame and Wood Frame Building - Canton

The Steel Frame and Wood Frame Building, 102 S.Second St., Canton, originally had two structures. The frame structure was torn down by the previous owner, while the remaining building, built in 1970, was constructed as a fertilizer plant for the production of agricultural fertilizer until 1985.

The previous owner left 55-gallon drums of unknown material behind when he sold the property. Invesitgation activities consisted of characterizing the material in the drums as hazardous waste for disposal purposes. These drums, and other raw materials on the property, were part of the fertilizer business and were taken off-site for proper disposal.

Solid waste was also present on the site and was properly disposed off-site. Hazardous waste was carefully containerized and disposed of off-site by a licensed contractor. Asbestos abatement was performed on the building prior to demolition. The building's concrete foundation was removed and the site graded with clean soil. The department determined that the site is safe for its intended use.

Pulse Family Properties Bailey Property – Canton

The Bailey Property site, 101 First St., Canton, was historically used for car restoration, a hay and grain warehouse, a boathouse and an ice manufacturing facility.

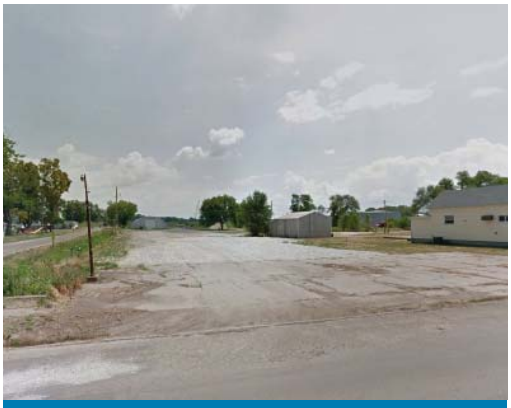
Two aboveground storage tanks (ASTs) and several 55-gallon drums and used tires were removed from the site. An old concrete foundation and cinderblock structure were also removed and the site was graded with soil. The department determined that the site is safe for its intended use.

Pulse Family Properties Vacant Lot and Quonset Building - Canton

The Vacant Lot and Quonset Building, 201 Lewis St., Canton, contained a one-story Quonset-style hut. There were also two reinforced concrete support saddles that are typically associated with ASTs; these are located immediately east of the Quonset-style hut. The site was historically used as a livery stable, residential properties, hotel properties and a lumber yard.

Site investigations indicated there were several labeled and unlabeled containers of various hazardous materials in the Quonset hut on the property. In addition, there were several pallets of various pesticides inside the hut. Soil sample results indicated concentrations of arsenic and lead exceeded the MRBCA lowest default target levels (DTLs); however the concentrations were below the generally accepted background values for arsenic and lead. Groundwater samples results indicated arsenic was detected but the concentrations did not exceed the MRBCA RBTLs. Lead was also detected in the groundwater samples but a temporary peizometer was utilized so suspended sediments could interfere with the test results. LCIDA performed a current and future groundwater use evaluation as outlined in Section 6.6 of the MRBCA Guidance Document (2006) so the domestic use of the groundwater pathway could be eliminated. The department determined that the site is safe for its intended use.

Pulse Family Properties Lewis County Intermodal Transportation and Storage - Canton



Pulse Family Properties Lewis County Intermodal Transportation and Storage - Canton

The Lewis County Intermodal Transportation and Storage site, 700 S. Fourth St., Canton, was built in the early 1970s and used first as a restaurant and truck stop, then later as an office building. Even though historical resources indicate ASTs were in operation in the 1950s, when the site was a truck stop, no evidence of ASTs could be found.

Site investigations identified asbestos in the flooring and window caulk in the old truck stop and restaruant building. These materials were removed and properly disposed off-site prior to building demolition. A truck scale was removed from the parking lot behind the building. Soil samples did not indicate contamination associated with the scale. The department determined that the site is safe for its intended use.

Pulse Family Properties Tri-State Fertilizer - Canton

The Tri-State Fertilizer site, 100 First St., Canton, was used for light industrial use from 1952 to 2005. The buildings were used for storage and blending fertilizers with other unknown chemicals. The buildings were dilapidated and abandoned by the owner, who left several barrels on-site. It was unknown what materials, if any, were stored in the barrels. LCIDA hoped to develop an attractive and useable light-industrial site to promote grain handling and barge loading facilities.

Site investigations revealed several unknown materials, used to make fertilizers, spilled on the building floor. These materials were properly characterized and contained prior to shipping off-site for disposal in a permitted landfill. Soil and groundwater samples indicated concentrations of arsenic, lead and ammonia exceeded the MRBCA lowest DTLs. The additional phase II environmental report indicated concentrations of arsenic in the near surface soils exceeded the MRBCA levels; however, the concentrations are below the background levels for arsenic in Lewis County, reported as 8.7 mg/kg. In addition, lead and ammonia did not exceed the MRBCA RBTLs in surface soils. Since the June 2011 phase II report, the building was demolished and the site was graded with additional soil, added to improve drainage around the building foundation. The near-to-surface soils were covered with clean soil preventing the dermal contact exposure pathway. Groundwater results indicate arsenic and lead were detected but arsenic did not exceed the MRBCA residential RBTLs. Lead concentrations exceeded the residential RBTLs based on domestic use standard. LCIDA performed a current and future groundwater use evaluation as outlined in Section 6.6 of the MRBCA document (2006) so the domestic use of groundwater pathway could be eliminated. The department determined that the site is safe for its intended use.

The Former F. Christen & Sons – St. Louis

The former F. Christen & Sons site, 121 Dock St., St. Louis, was a former salvage yard. Past site use included bellows manufacturing (1909-1965), box manufacturing (1930-1975) and a recycling/junk yard (1980-2001). The site was abandoned and is tax-reverted land. Site investigations revealed the presence of total petroleum hydrocarbons-diesel range organics (TPH-DRO), polynuclear aromatic hydrocarbons (PAHs), lead and polychlorinated biphenyls (PCBs) in soils. Exposed surface soil was impacted by historic surface releases. Remediation activities consisted of tire removal and surface soil excavation of TPH-DRO, PAHs, lead and PCBs with proper off-site disposal. Based on these remedial activities, the site currently meets the non-residential use contingent upon a restrictive covenant being placed on the property prohibiting residential use and requiring maintenance of an applicable engineered barrier. The department determined that the site is safe for its intended use.

The Former Heritage/AT&T Building Site – St. Louis

The former Heritage/AT&T Building site, 4240 Duncan Ave., St. Louis, was previously occupied by Western Electric Company, Southwestern Bell Telephone Co., Midwest Distribution Co., Travco Distribution Inc., Heritage Communications, Heritage Exposition Services and Easy Business Mailers Inc.

This site contained an underground heating oil storage tank with a capacity of approximately 25,000 gallons. Site activities were conducted in accordance to MRBCA Tanks guidelines. The tank was vacuumed of all liquid and cleaned before it was removed. Staining and contamination were observed during the excavation. Overburden was disposed of as hazardous waste. The pit was over excavated to remove any contamination. Closure sampling indicated that contamination is below tier 1 residential levels for soil type 1. The department determined that the site is safe for its intended use.

Boonville Track 104 Fertilizer - Boonville

The Boonville Track 104 Fertilizer site, Fourth Street and East Water Street, Boonville, was occupied by ASTs and a metal scrap yard prior to the installation of conveyor equipment and occupation by Interstate Marine Terminal (IMT) in 2001. IMT used the site to off-load ammonium nitrate from approximately 2001 to 2006. ConAgra took over the IMT operation in 2006 and used the site to conduct transfers of solid ammonium nitrate, liquid nitrogen and potash from 2006 to 2008. ConAgra then sold this division, along with other non-food related divisions, that were formed into Gavilon Fertilizer LLC in July of 2008. Gavilon currently conducts transfers of liquid nitrogen and potash.

During environmental investigations conducted in 2007, ammonia as NH3, benzene, naphthalene, total petroleum hydrocarbons-gasoline range organics (TPH-GRO), and lead were detected in soil and groundwater. Subsequently, groundwater monitoring was conducted from 2010 to 2012 to determine the extent of contamination. Chemical analysis indicates concentrations of contaminants do not exceed 2006 MRBCA tier 1 RBTLs for residential soil Type 1. The contaminate plumes are not expanding beyond the site and the site is not likely to be developed for resident use; therefore the site meets the requirements for unrestricted use. The department determined that the site is safe for its intended use.

Family Dollar Store Property - Natural Bridge – St. Louis

The Family Dollar Store Property - Natural Bridge site, 4475 and 4487 Natural Bridge Ave., St. Louis, consists of two parcels of land located at the intersection of Natural Bridge Avenue and North Taylor Avenue. The site has historically served as residential property, a curtain cleaner, a fast food restaurant, an automotive repair shop and a gasoline station. Currently, the site is occupied by a 25,000 square foot convenience store surrounded by paved parking lot with an 8,000 square foot garage used for storage space.

A 2012 phase II subsurface investigation identified the presence of petroleum hydrocarbons and chlorinated solvents, primarily tetrachloroethylene (PCE), in soil and groundwater. Only PCE and trichloroethylene (TCE) in groundwater were found to exceed levels of concern. The detection was limited to one sample location on the south corner of the property (an asphalt parking lot area) and was not associated with any known source of release at the site. Additional sampling of surficial soil conducted in July of 2013 at the request of the BVCP did not reveal the presence of contamination above levels of concern. A tier 1 risk assessment was performed in accordance with the 2006 MRBCA guidance to evaluate risk posed by PCE and TCE in groundwater. The assessment determined cumulative risk to be acceptable for residential vapor intrusion, but concentrations exceeded risk standards for residential domestic use of groundwater. Since the site is within the City of St. Louis, city ordinance 6677 prohibits installation and use of private wells rendering potential domestic use pathways incomplete. The site therefore qualifies for unrestricted use. The department determined that the site is safe for its intended use.

Carousel Building - Eldon

The Carousel Building site, 619 E. Eighth St., Eldon, is a 65,000 square foot building on 4.5 acres. It was formerly used as a shoe company from 1940 into the 1960s and a carousel manufacturing facility from 1960-2003. The building is composed of brick and steel and is in fair condition. Potential contaminants are asbestos and hazardous materials.

Site investigations revealed the presence of ACM, LBP and metals-containing residue and soil assocated with a sand blasting booth and baghouse filtering unit at the former Carousel Buillding site. Remedial actions included the removal and proper disposal of ACM and LBP from the building. Metals containing residue and soil were also removed and properly disposed off-site in an approved landfill. The department determined that the site is safe for its intended use. This site was assessed under the Missouri Brownfield Assessment Program.

Input Technology, Inc. – St. Louis

The Input Technology Inc. site, 1470 S. Vandeventer, St. Louis, is a one acre site with a two-story, 30,000 square foot building. This site is occupied by a company that produces mass mailings via digital printing. From 1940 until 1991 the site was used as a chemical lab, manufacturing and supply facility. A phase II assessment on the site indicated the soil and groundwater were contaminated with PCE, TCE, vinyl chlorides and cis-1,2- dichloroethylene (DCE). It appeared the contamination was from a historical release and not a result of current site activities.

Based on the results of a September 2009 site characterization and groundwater monitoring report and previous investigations, riverfront delineated the extent of impact to the east, south and west of the site. All other contaminants of concern for soil and groundwater were below DTLs. Results of the December 2009 and March 2010 (3rd and 4th quarter) groundwater monitoring events indicated the groundwater plume was stable. The April 2011 revised tier 1 and tier 2 risk assessment indicated the calculated individual excess lifetime cancer risk (IELCR) for each contaminant of concern and the cumulative site-wide IELCR were below the acceptable risk levels for non-residential use. The department determined that the site is safe for its intended use.

The Former Van Brunt Street Car Barn – Kansas City

The former Van Brunt Street Car Barn, East Ninth Street and Van Brunt Boulevard, Kansas City, was previously enrolled in the BVCP and received a certificate of completion in September of 2010. During concrete removal and site grading for redevelopment activities, a black granular material was encountered in the shallow subsurface and needed to be removed. Thus, the city reentered the site in the BVCP for additional cleanup. Former uses for the site include: electric street car maintenance, Area Transportation Authority bus maintenance, a public works body shop and vehicle fueling facility.

Excavation of material was spread just below the ground surface across a large portion of the site. At the request of the city, the material was sampled and lab results indicated samples did exceed the MRBCA, 2006 DTLs for arsenic, lead, selenium and naphthalene. However, only the lead concentration, which was 1,600 milligrams per kilogram, exceeded the tier 1 screening level.

The proposed remedial plan was approved for the management of the lead-impacted material. The lead-impacted material was excavated using track excavators and transported to the southwest portion of the site to be placed into the lower portion of the proposed all weather soccer field. After placement of lead-impacted material into the excavation, a minimum two-foot thick layer of clean clay fill was used to provide a protective cap. An approximately one-foot thick layer of crushed concrete was placed above the clay cap, followed by the drainage system and turf for the all-weather soccer field. A youth soccer field and an amphitheater were constructed as part of the park development. The department determined that the site is safe for its intended use.

The Former Hannibal Auto Salvage - Hannibal

The former Hannibal Auto Salvage site, 322 S. Eighth St., Hannibal, has included several past businesses operating at the site: Duffy Trowbridge Coal Co., Cash Coal Company, Higgins Janitorial Service, Burke Printing, Yellow Cab Company and International Tool Corporation.

Site investigations indicated volatile organic compounds (VOCs), particularly PCE and TCE, were detected in groundwater samples at concentrations above the DTLs. A site characterization report and risk management plan, according to the MRBCA technical guidance of 2006, were prepared and submitted to the BVCP. After several quarterly groundwater monitoring events, PCE and TCE representative concentrations were below the non-residential and construction worker tier 1 RBTLs. The department determined that the site is safe for its intended use.

Hannibal Machine - Hannibal

The Hannibal Machine site, 400 S. 11th St., Hannibal, was the past location of several businesses: a shoe company, rubber factory, International Shoe Company, warehouse for International Shoe Company, and machine and welding shop. Contaminants found in groundwater included acrolein and lead above the MRBCA DTLs.

Previous site investigations revealed the presence of lead and acrolein in the groundwater at the property. Further site investigation and characterization were performed to determine the extent of these contaminants in the groundwater; however, they were not detected at or above the detection limits in the site characterization groundwater samples. However, polycyclic aromatic hydrocarbons (PAHs) were identified in the site groundwater above the MRBCA 2006 DTLs. After several quarters of groundwater monitoring, the plume stability analysis indicated that PAHs in groundwater appeared to be decreasing. A risk management plan was prepared to ensure the contaminants of concern are acceptable under the MRBCA guidance. The department determined that the site is safe for its intended use.

Joe Ogden's Garage - Hannibal

Joe Ogden's Garage - Hannibal

The Joe Ogden's Garage site, 700-02 S. Main St., Hannibal, has several past site uses: auto repair, battery and electric shop and a furnace company. A phase II environmental site assessment indicates lead in soil above MRBCA DTLs.

Site investigations indicated lead in soil at concentrations above the MRBCA 2006 DTLs and area background levels. The site formerly operated as an auto repair shop and has been developed since at least 1885. Based on the results of the site characterization and tier 1 risk assessment, the representative concentrations of lead contamination in the surface and subsurface soil were below the MRBCA non-residential target land use level. The department determined that the site is safe for its intended use.

The City of Hannibal is engaged in a commercial flood buyout program. The program originated in the aftermath of the 2008 flood and will include the acquisition, demolition and natural restoration of certain commercial properties located in the floodplain. The goal of the project is to remove life and property from future harms' way.

Sites in Brownfields/Voluntary Cleanup Program

Month	Active	Completed	Total
January 2014	237	717	954
February 2014	236	720	956
March 2014	236	726	962

New Sites Received: 10

January
Post Office Redevelopment, St. Charles

February
Dollar Genral Troost Ave, Kansas City
Coves Plaza, Kansas City

March
Alva Allen Industries, Clinton
Park & Thoman, Stingfield
Colonial Baking Company (former), Springfield
West Pine Lofts, St. Louis
HCI Properties LLC, Kansas City
St. Lucas Church, St. Louis
Residential Apartment Building, St. Louis

Sites Closed: 16

January
F. Christen & Sons (former), St. Louis
Bailey Property, Canton
Lewis County Intermodal Trasportation
and Storage, Canton
Steel Frame and Wood Frame Building, Canton
Train Dopot, Canton
Tri-State Fertilizer, Canton
Vacant Lot and Quonset Building, Canton

February
Booneville Track 104 Fertilizer, Booneville
Heritage/AT&T Building (former), St. Louis
Family Dollar Store Property - Natural Bridge, St. Louis

March
Input Technology, Inc., St. Louis
Van Brunt Street Car Barn (former), Kansas City
Carousel Building, Eldon
Joe Ogden's Garage, Hannibal
Hannibal Machine, Hannibal
Hannibal Auto Salvage (former), Hannibal

Reimbursement Claims

The applicant may submit a reimbursement claim after all work approved in the work plan is complete and the fund project manager has reviewed and approved the final completion report for that work. The fund applicant is liable for the first $25,000 of corrective action costs incurred.

Month	Received	Under Review	Paid/Processed
January	0	5	3
February	0	5	1
March	6	0	0

Month	Received	Under Review	Paid/Processed
January	$0.00	$57,016.69	$26,884.66
February	$0.00	$40,880.12	$7,460.20
March	$331,674.02	$0.00	$0.00

Reimbursement Claims Processed

Site Name	Location	Paid
AG Cleaners	Kirkwood	$14,093.04
Charter Dry Cleaning	Ellisville	$4,970.50
First Capitol Cleaners	St Charles	$15,281.32

Total reimbursements as of March 31, 2014: $2,448,616.61

DERT Fund Balance as of March 31, 2014: $621,243.20

Drycleaning Environmental Response Trust Fund

The Department of Natural Resources' Drycleaning Environmental Response Trust (DERT) Fund provides funding for the investigation, assessment and cleanup of releases of chlorinated solvents from dry cleaning facilities. The two main sources of revenue for the fund are the dry cleaning facility annual registration surcharge and the quarterly solvent surcharge.

Registrations

The registration surcharges are due by April 1 of each calendar year for solvent used during the previous calendar year. The solvent surcharges are due 30 days after each quarterly reporting period.

Calendar Year 2014	Active Dry Cleaning Facilities	Facilities Paid	Facilities in Compliance
January - March 2014	150	76	50.67%

Calendar Year 2014	Active Solvent Suppliers	Suppliers Paid	Suppliers in Compliance
January - March 2014	11	10	90.91%

Cleanup Oversight

Calendar Year 2014	Active Sites	Completed Sites	Total
January - March 2014	26	15	41

New Sites Received: 0 **Sites Closed: 0**

The Largest Environmental Settlement in U.S. History

The proposed $5.1 billion cash settlement, announced April 3, stems from a legal battle between Kerr-McGee Corp. and Tronox Inc. This is the largest environmental enforcement recovery by the U.S. Department of Justice, breaking the record-setting $4.5 billion settlement between British Petroleum and the U.S. Department of Justice for the 2010 Deepwater Horizon oil spill in the Gulf of Mexico.

The proposed settlement agreement between the United States and Anadarko Petroleum Corp., the parent company of Kerr-McGee, is the result of a fraudulent conveyance lawsuit filed by Tronox and pursued by the United States and co-plaintiff Anadarko Litigation Trust. The lawsuit grew out of bankruptcy proceedings in U.S. Bankruptcy Court regarding Tronox Inc., who was a subsidiary of Kerr-McGee before being spun off as an independent company.

The U.S. Department of Justice lodged the proposed settlement agreement, which can be found online at www.justice.gov/enrd/6377.htm, with the U.S. Bankruptcy Court for the Southern District of New York. The public was invited to review and submit comments on the proposed settlement agreement until May 14, 2014. After the 30-day public comment period, the proposed settlement agreement was submitted for the court's approval.

The Fraudulent Conveyance

Kerr-McGee operated numerous chemical, energy and manufacturing businesses for over 85 years across the United States, including oil and gas exploration and production facilities, uranium and other mines, radioactive thorium processing plants, creosote wood treating facilities, chemical plants, fertilizer/pesticide facilities, nuclear fuel processing facilities and facilities that manufactured perchlorate, a component of rocket fuel. These operations left about 2,800 sites contaminated with hazardous waste in 47 states, including two former Missouri wood treating facilities owned by Kerr McGee's Forest Products Division. Kerr-McGee had accumulated massive environmental liabilities.

Starting in 1990, the oil and gas exploration and production industry was undergoing significant consolidation. Kerr-McGee had attracted potential buyers during this time; however, selling the company was unsuccessful due to Kerr-McGee's environmental liabilities. In 2001, Kerr-McGee began to isolate their oil and gas exploration assets from the environmental liabilities. Kerr-McGee transferred the contaminated sites and environmental liabilities to their Chemical Division. Kerr-McGee created a new "clean" corporate entity, New Kerr-McGee, and transferred its oil and gas exploration assets and all other businesses except the Chemical Division to New Kerr-McGee. Old Kerr-McGee then formed a new wholly-owned subsidiary, Kerr-McGee Chemical Worldwide LLC, and merged into it. As a result of this restructuring, the environmental liabilities were only partially separated, since New Kerr-McGee was still the parent company of Kerr-McGee Chemical.

On Sept. 12, 2005, after an unsuccessful attempt to sell Kerr-McGee Chemical, New Kerr-McGee renamed the Chemical Division to Tronox Inc. On Nov. 21, 2005, Tronox became a publicly traded company when New Kerr-McGee sold a minority stake in Tronox through an initial public offering, but maintained controlling interest in Tronox by retaining a majority of the Tronox shares. New Kerr-McGee spun Tronox off as an independent company by distributing its remaining shares of Tronox to the New Kerr-McGee stockholders. Tronox became an independent company on April 1, 2006. Less than three months after the completion of the Tronox spin-off, New Kerr McGee changed its name back to Kerr-McGee. Anadarko Petroleum Corp. offered $16.4 billion, plus the assumption of $1.6 billion in debt, to acquire Kerr-McGee, which shareholders approved in August 2006.

The Bankruptcy

Tronox began to struggle almost immediately after the March 2006 spinoff. Tronox was rendered insolvent, undercapitalized and unable to pay its environmental and other liabilities when they came due. Tronox had at least $1 billion in environmental claims. On Jan. 12, 2009, Tronox filed for relief under Chapter 11 bankruptcy.

The Department of Justice, representing EPA, and several state Attorney Generals, including the Missouri Attorney General's Office, worked with Tronox on its joint plan of reorganization. As part of the bankruptcy settlement agreement, in exchange for release from the environmental liabilities, Tronox funded several trust accounts with an estimated five years of funding for the environmental claimants for corrective action and oversight of the contaminated facilities. This was accepted by the tort and environmental claimants because failure to do so would likely cause Tronox to liquidate and, as unsecured claimants, recovery of any funds would be unlikely. The bankruptcy settlement agreement provided the environmental claimants a total of approximately $270 million for cleanup costs incurred or to be incurred. Included in the total was $3.8 million for estimated site care maintenance costs for five years for the two Missouri facilities.

On Feb. 14, 2011, all rights, titles, and interests in the Tronox contaminated sites were transferred to several trust funds established for that purpose; the Multistate Trust, Savannah Trust, Henderson Trust, Cimarron Trust and West Chicago Trust. The trusts were funded with the five years of site care maintenance costs in specific amounts as specified in the bankruptcy settlement agreement. Tronox transferred 24 of its facilities, including the two former Missouri wood treating facilities, to the Greenfield Environmental Multistate Trust LLC. Greenfield took ownership and operational control on Feb. 14, 2011. The environmental trust administers cash funds from the settlement for site care and monitoring.

The bankruptcy settlement agreement also established the Anadarko Litigation Trust to pursue the interests of the environmental and tort claimants in the lawsuit against Anadarko and Kerr-McGee. As part of the settlement agreement, Tronox also agreed that any money resulting from a lawsuit against Kerr-McGee Corp. and Anadarko Petroleum Corp. would be divided between the bankruptcy tort and environmental claimants.

The Lawsuit

On May 12, 2009, Tronox filed a $15.5 billion fraudulent conveyance lawsuit against Kerr-McGee and Anadarko, claiming violations of the Exchange Act. Tronox claimed Kerr-McGee burdened the company with environmental liabilities through the 2006 spinoff, which doomed Tronox to fail. These environmental liabilities were unrelated to its chemical business. The federal government later entered the lawsuit as an intervener on June 15, 2009. Tronox creditors and the government argued the companies should pay billions of dollars to clean up thousands of contaminated sites around the U.S. and compensate people who claim they were harmed by Kerr-McGee's pollution. Tronox was also seeking the full value of assets it says were fraudulently transferred into Anadarko.

On Dec. 13, 2013, the court found Old Kerr-McGee Corp. and Anadarko fraudulently conveyed assets to New Kerr-McGee in order to separate Kerr-McGee's oil and gas assets from its legacy environmental liabilities and transferred those assets for less than their fair value. The court found the companies responsible for substantial damages resulting from this fraud. Kerr-McGee and Anadarko agreed to pay $5.1 billion under the lawsuit settlement agreement.

Missouri Department of Natural Resources - Hazardous Waste Program

Missouri Facilities

Kerr McGee previously owned two former wood treating facilities in Missouri. One facility is 114-acres, located at 2300 Oakland in Kansas City. The other facility is 68-acres located at 2800 W. High St. in Springfield. American Creosote Corp. built both facilities in 1907 to manufacture railroad cross-ties and switch ties, using creosote as a preservative. Kerr-McGee Corp., Forest Products Division, acquired the facilities in 1964 and 1965, respectively, and continued the same operations. The creosote-treating operations at the Kansas City facility went inactive in April 1983; however, Kerr-McGee continued to use the site as a distribution center for treated wood products. The Springfield facility closed in December 2003.

Kerr-McGee used hazardous waste surface impoundments at both facilities for long-term storage of sludge produced by the treatment of wastewaters from the creosote wood preserving processes. Creosote bottom sediment sludge is classified as hazardous waste and is regulated under the Resource Conservation and Recovery Act, or RCRA. Kerr McGee operated the surface impoundments under the interim status portions of the federal and state hazardous waste laws. When Congress passed the hazardous waste federal law in 1980, all existing facilities that treated, stored or disposed of hazardous waste were allowed to operate temporarily under "interim status" until they either received a hazardous waste permit or closed the regulated hazardous waste units. According to applicable state and federal hazardous waste laws and regulations, all hazardous waste treatment, storage and disposal facilities are also required to investigate and clean up releases of hazardous waste and hazardous constituents to the environment at their facility resulting from present and past hazardous waste handling practices.

Kansas City Facility Cleanup

Kerr McGee operated one clay-lined surface impoundment at the Kansas City location. Active use of the surface impoundment stopped in 1983 when wood treating operations went inactive. The surface impoundment was closed in 1988; however, the surface impoundment is required to go through a period of post-closure care because hazardous waste remained in place after closure. As part of the post-closure care, the facility is required to operate and maintain a groundwater monitoring system and the cover over the closed impoundment.

Several investigations confirmed past operations impacted soil and groundwater in several areas at the facility, with creosote as the main contaminant. In order to reduce or prevent unacceptable risks to human health and the environment, Kerr-McGee installed groundwater recovery wells to remove free phase creosote product. The recovered groundwater is treated in an on-site wastewater pre-treatment facility. Kerr-McGee, later Tronox, was conducting post-closure and corrective action activities under two hazardous waste permits, one issued by the department and one issued by the EPA.

Springfield Facility Cleanup

Kerr McGee operated four surface impoundments at their Springfield location. One of the surface impoundments was closed in 1973, before the RCRA regulations existed. In 1979, Kerr McGee built an experimental landfarm at the facility, to treat sludge produced from closing the impoundment. The sludge was applied in three yearly applications from 1979 to 1981. The remaining three impoundments were built between 1973 and 1976. All three impoundments were closed in 1988. In 1990, the landfarm also went through closure since the creosote did not completely degrade to non-hazardous levels. All four units are required to go through a period of post-closure care because hazardous waste remained in place after closure. As part of the post-closure care, the facility is required to operate and maintain a groundwater monitoring system and the cover over the closed impoundments and landfarm.

Initial investigations identified soil and groundwater contamination, with contaminated groundwater extending off-site, northeast of the facility. In 1985, Kerr-McGee installed six sumps in a recovery

trench used to recover impacted groundwater and accumulated creosote product. Three additional trenches were installed between 1994 and 1996. Kerr-McGee, later Tronox, was conducting postclosure and corrective action activities under two hazardous waste permits, one issued by the department and one issued by the EPA.

Settlement Funds

The Tronox Bankruptcy Settlement Agreement set aside approximately $3.8 million for the department for the two Missouri facilities, of which $1,743,398 was for the Kansas City facility and $2,025,323 was for the Springfield facility. The bankruptcy settlement agreement also stipulated that approximately 12 percent of the proceeds from the lawsuit against Kerr-McGee and Anadarko would pay the tort claims of people who have health effects from the pollution and approximately 88 percent would pay for federal, state, local and tribal environmental cleanups.

The bankruptcy settlement agreement specified a certain percentage of this funding to be made available to each site.

If the court approves the proposed settlement agreement, approximately $4.4 billion of the $5.15 billion proceeds will fund environmental cleanup and pay for environmental claims. Approximately 25 percent of the proceeds will be deposited into the Multistate Trust to cover remediation of contamination caused by 24 facilities formerly owned by Kerr-McGee in numerous states. The department will receive 0.5 percent for each Missouri site. These funds never become “monies of the state,” but will be spent with oversight and budget approval by the department. The State of Missouri will also receive 0.15 percent of the $4.4 billion in cash payments for Natural Resource Damage claims, 0.033 percent for the Kansas City facility and 0.117 percent for the Springfield facility. These payments will be deposited in the state’s Natural Resource Protection Fund.

The Permits Section spent considerable time and resources coordinating with the EPA and the U.S. Department of Justice during the bankruptcy proceedings, including preparing cost estimates in support of bankruptcy claims and providing technical support to department legal and Missouri Attorney General’s staff regarding bankruptcy-related issues. The permits section also participated in discussions with the Department of Justice regarding development of the bankruptcy settlement agreement and trust fund language development. Without the hard work of department staff, these funds may not have been possible.

Regional Office Hazardous Waste Compliance Efforts

- Conducted 111 hazardous waste generator compliance inspections:
  - *24 at large quantity generators*
  - *57 at small quantity generators*
  - *17 at conditionally exempt small quantity generators*
  - *Three resource recovery inspections*
  - *Nine at E-waste recycling facilities*
  - *One targeted re-inspection*
- Conducted eight compliance assistance visits at hazardous waste generators
- Issued 42 letters of warning and five notices of violation requiring actions to correct violations cited during the 92 inspections conducted.
- Received and investigated a total of 48 citizen concerns regarding hazardous waste generators.

Underground Storage Tank (UST) Compliance and Technology Unit (CTU)

New regulation changes are progressing. To comply with the Environmental Protection Agency Energy Policy Act requirements, the department will require all new UST systems installed after July 1, 2017, to be double-walled with improved monitoring. The new regulation proposals will also include Missouri-specific improvements, as well any "new" federal regulation changes. Staff have participated in meetings/outreach efforts to update and provide opportunity for the regulated community to have input on the regulations. In addition, the contract has been awarded to conduct Missouri's Operator Training Program. Stay tuned as this program develops and training begins.

Tank Inspection Efforts – This fiscal year's contracted inspections have now been completed. As we have seen in previous years, Missouri owners, operators and contractors continue to demonstrate their proactive compliance, responsiveness to issues when found and willingness to be a partner in ensuring all Missouri USTs are in compliance. The efforts by our regulated community have allowed the department to maintain compliance with the EPA requirement of inspecting all regulated facilities at least every three years. Furthermore, the department must demonstrate that all facilities are either in compliance or are moving to gain compliance. This goal is much easier to accomplish when owners, operators, contractors and regulators all work together to address problems at facilities.

Out-of–use Tank Efforts – Staff continue to make tremendous efforts and are achieving good results in prompting responsible parties to close out-of-use tanks or take other appropriate site-specific actions. To date, these efforts have resulted in approximately 20 percent of the out-of-use sites moving toward permanent closure.

Tank Enforcement Efforts - In addition to work on the out-of-use tank sites noted above, efforts continue to resolve violations with facilities that did not maintain financial responsibility (FR) to address releases and to protect third parties. Because of these efforts, the UST CTU staff and the Attorney General's Office continue to keep the number of facilities without a verified financial responsibility mechanism to less than 30.

Special Facilities Unit

Commercial Facility Inspectors - Special facilities inspectors conducted 13 inspections of commercial hazardous waste treatment/storage/disposal facilities (TSDs), two of which resulted in the issuance of notices of violation.

Polychlorinated Biphenyl (PCB) Inspector - The inspector conducted 14 compliance inspections at various types of facilities throughout the state. The inspector's reports are forwarded to the U.S. EPA, Region 7, which has authority for taking any necessary enforcement action regarding PCBs according to the Toxic Substances Control Act.

Hazardous Waste Transporters - The inspector conducted a focused review of the 2013 Conditionally Exempt Small Quantity (CESQG) Uniform Hazardous Waste Manifests and Hazardous Material Manifests at a Missouri TSD facility and transporter transfer terminal.

As of March 31, there was a total of 271 licensed hazardous waste, used oil and infectious waste transporters in Missouri.

Hazardous Waste Enforcement Unit

Enforcement Efforts

- Resolved and closed five hazardous waste enforcement cases
- Received six new enforcement cases
- Sent three penalty negotiation offer letters

Walter Wurdack Incorporated

Walter Wurdack Incorporated is a specialty paint manufacturer located in St. Louis. The facility failed to keep containers closed in storage; store ignitable waste more than 50 feet from the property line; package, label and mark containers per Department of Transportation (DOT) requirements during the entire on-site storage period; mark "Hazardous Waste" on hazardous waste containers; inspect and maintain the facility weekly; conduct daily inspections of areas subject to spills; provide adequate aisle space; have placards available for transporters; have "No Smoking" signs posted near ignitable or reactive waste; keep satellite containers closed; mark containers identifying contents and accumulation start date; store satellite containers at or near the point of generation; operate and maintain the facility to minimize the possibility of an emergency; have adequate and proper spill control available; post the emergency coordinator's name and telephone number near the telephone; make employees familiar with waste handling and emergency procedures; have a device in the hazardous waste operation area capable of summoning emergency assistance; meet the operating conditions of the certification; submit a timely written request and receive the associated approval from the department for all changes in operations including closure; store hazardous waste destined for resource recovery in accordance with all applicable state hazardous waste regulations; use a manifest system or ensure waste was reclaimed under contractual agreement; characterize waste to determine if it was restricted from land disposal; and ensure that the "Land Ban" notification includes the correct uniform hazardous waste manifest number.

As a result of the department's actions, the facility disposed of hundreds of pounds of expired raw materials that were also hazardous; reconfigured waste handling procedures to ensure hazardous waste was not stored within 50 feet of the property line; purchased new lids for ignitable waste; and developed and implemented a new and much more extensive training program in hazardous waste management for employees.

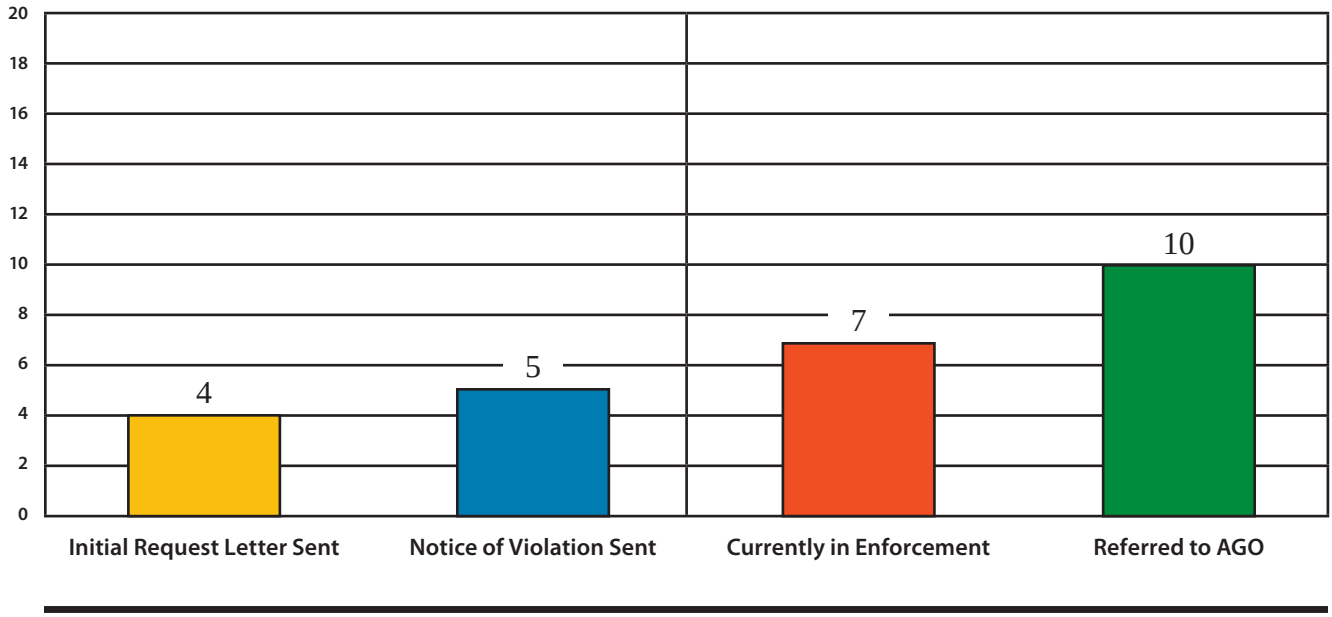
The penalty is $30,000, of which $10,000 is suspended contingent on the facility not committing any repeat or class I violations for two years following the effective date of the settlement agreement. The remaining penalty of $20,000 shall be paid in 11 monthly payments of $1,700 each and one payment of $1,300 to the St. Louis City School Fund.

The actions taken by the company will result in protection of the environment and adjoining property and persons and safer working conditions for employees.

Underground Storage Tank Facilities with Unknown Financial Responsibility Status Report

Financial Responsibility Status	Number of Facilities
Initial Request Letter Sent	4
Notice of Violation Sent	5
Currently in Enforcement	7
Referred to Attorney General's Office	10
Total Number of Facilities with Unknown Financial Responsibility	26

Number of Facilities in Each Financial Responsibility Step



*This semi-monthly report is derived directly from a copy of the UST Database and provides a "snapshot" of the status for each active underground storage tank facility not covered by a proper Financial Responsibility Mechanism.

Department Attends the Annual Petroleum and Convenience Store Association Exposition

Staff from the tanks compliance and enforcement section recently attended the Petroleum and Convenience-Store Exposition of Mid-America (PACE) held at the Kansas City Convention Center, Bartle Hall, on Feb. 28 and March 1. PACE is the premier Midwest tradeshow with more than 4,000 attendees from Missouri, Kansas, Iowa and Nebraska. This regional tradeshow attracts many key industry leaders and features the latest in petroleum and convenience store products such as tank system equipment, hardware, soft goods, technology and the hottest new trends and services.

Staff had a chance to meet and share information with members of the industry in an informal setting. Materials displayed included the Missouri Resources magazine, a variety of the department's technical bulletins on underground storage tank management and other underground storage tank publications. Many questions were answered, policies discussed and even a few compliments were received.

Staffing the booth from the tanks closure unit included Chris Veit from the closure, release and investigations unit and Heather Peters from the compliance and enforcement section, compliance and technology unit. Several members of the tanks section, the compliance and enforcement section and the tanks section chief also attended the exposition.

Tanks Section Planning Workshop at the Missouri Waste Coalition Conference

Laura Luther and Ken Koon from the tanks section are participating on the Missouri Waste Control Coalition to help plan the 2014 Missouri Waste Coalition Conference (MWCC) at the Tan-Tar-A Resort at the Lake of the Ozarks on June 29th through July 1st. This will be the sixth annual workshop in conjunction with the MWCC conference. The conference is comprised of participants who are citizens, government staff, various business and industry stakeholders. Participants come together annually to discuss the rapidly changing field of waste management and other environmental issues.

The tanks session is targeted toward environmental consultants who provide services to tank owners and operators. The session will provide consultants with information and training regarding the Missouri Risk-Based Corrective Action for petroleum tanks and included presentations and discussions on a couple of remediation technologies.

The workshop consists of departmental staff, along with private consultants, private laboratories and others. The Environmental Protection Agency may also participate in the conference as an exhibitor and in a support role.

Missouri Department of Natural Resources - Hazardous Waste Program

Petroleum Storage Tanks Regulation December 2013

Staff Productivity	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	TOTAL
Documents received for review	185	220	179	198	167	181	203	168	152	0	0	0	1,653
Remediation documents processed	146	158	168	174	119	142	169	120	159	0	0	0	1,355
Closure reports processed	14	5	12	13	7	8	27	13	9	0	0	0	108
Closure notices approved	11	18	16	10	16	7	27	13	7	0	0	0	125
Tank installation notices received	4	6	6	5	5	3	3	1	11	0	0	0	44
New site registrations	5	4	4	2	3	5	1	4	0	0	0	0	28
Facility Data	**Jul-13**	**Aug-13**	**Sep-13**	**Oct-13**	**Nov-13**	**Dec-13**	**Jan-14**	**Feb-14**	**Mar-14**	**Apr-14**	**May-14**	**Jun-14**	**TOTAL**
Total in use, out of use and closed USTs	40,594	40,610	40,624	40,641	40,656	40,663	40,691	40,702	40,707	0	0	0	
Total permanently closed USTs	31,392	31,406	31,424	31,453	31,475	31,495	31,533	31,571	31,596	0	0	0	
In use and out of use USTs	9,202	9,204	9,200	9,188	9,181	9,168	9,131	9,111	9,111	0	0	0	
Out of use USTs	853	870	867	853	845	824	799	791	771	0	0	0	
Total hazardous substance USTs	399	399	399	399	400	400	400	404	404	0	0	0	
Facilities with in use and out of use USTs	3,525	3,527	3,525	3,516	3,517	3,517	3,503	3,501	3,491	0	0	0	
Facilities with one or more tank in use	3,233	3,229	3,226	3,223	3,225	3,232	3,224	3,224	3,224	0	0	0	

Closures

Underground Storage Tanks	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	TOTAL	All Yrs
Closure Reports Reviewed	14	5	12	13	7	8	27	13	9	0	0	0	108	
Closure Notices Approved	11	18	16	10	16	7	27	13	7	0	0	0	125	
Number of Tanks Closed (Closure NFA)	17	30	42	11	28	8	51	47	21	0	0	0	255	

Cleanup

Underground Storage Tanks													TOTAL	All Yrs
UST release files opened this month	9	6	8	5	8	4	14	7	8	0	0	0	69	6,583
UST cleanups completed this month	7	6	13	3	9	2	12	8	4	0	0	0	64	5,699
Ongoing UST cleanups	879	879	873	874	874	878	881	880	881	0	0	0		
Aboveground Storage Tanks														
AST release files opened this month	0	1	0	1	1	3	1	0	0	0	0	0	7	467
AST cleanups completed this month	1	1	3	1	2	0	4	0	2	0	0	0	14	281
Ongoing AST cleanups	192	192	187	190	189	192	190	188	186	0	0	0		
Both UST and AST														
Total release files-both UST & AST	0	0	0	0	0	0	0	0	0	0	0	0	0	78
Cleanups completed-both UST & AST	0	0	0	0	1	0	0	0	0	0	0	0	1	47
Ongoing cleanups-both UST & AST	29	29	29	29	29	29	31	31	31	0	0	0		
Unknown Source														
Total release files-unknown source	1	0	7	2	0	3	0	0	1	0	0	0	14	226
Cleanups completed-unknown source	1	0	4	1	0	1	1	0	0	0	0	0	8	182
Ongoing cleanups-unknown source	20	20	24	22	21	20	19	18	19	0	0	0		
Documents Processed	146	158	168	174	119	142	169	120	159	0	0	0	1,355	
*Reopened Remediation Cases	0	0	0	0	1	0	0	0	0	0	0	0	1	77

** Reopened Remediation Cases was added Nov. 18, 2009 - the cumulative total has been queried and a running total will be tracked/reported with the FY 2010 Tanks Section Monthly Reports.*

Effective December 2008 tanks with unknown substance will be included in total figures. Some measures are re-calculated each month for all previous months to reflect items added or edited after the end of the previous reporting period.